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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/913,329	08/21/2001	Luc Desgroseillers	163-34	8479

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EXAMINER	
PAK, YONG D	

ART UNIT	PAPER NUMBER
1652	14

DATE MAILED: 06/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/913,329	DESGROSEILLERS ET AL.	
	Examiner	Art Unit	
	Yong D Pak	1652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *1* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 April 2003* .

2a)☐ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-38* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

This application is 371 of PCT/CA00/00147.

Claims 1-38 are pending.

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1, drawn to a method of obtaining a neprilysin-like metallopeptidase.

Group II, claim(s) 2-5, drawn to the mouse NL-1 of Figure 3.

Group III, claim(s) 6, 14 and 29, drawn to the DNA encoding the mouse NL-1 of group II.

Group IV, claim(s) 7, drawn to an antibody against the mouse NL-1 of group II.

Group V, claim(s) 8, drawn to a method of obtaining a substrate of the mouse NL-1 of group II.

Group VI, claim(s) 9-12, drawn to a method of obtaining an inhibitor of the mouse NL-1 of group II, the inhibitor and a method of using the inhibitor.

Group VII, claim(s) 13, drawn to a method of using a metallopeptidase.

Group VIII, claim(s) 15 and 28, drawn to a method of producing a soluble protein.

Group IX, claim(s) 16-19, drawn to the NL-2 of Figure 4.

Group X, claim(s) 20 and 29, drawn to the DNA encoding the NL-2 of group IX.

Group XI, claim(s) 21, drawn to an antibody against the NL-2 of group IX.

Group XII, claim(s) 22, drawn to a method of obtaining a substrate of the NL-2 of group IX.

Group XIII, claim(s) 23-26, drawn to a method of obtaining an inhibitor of the NL-2 of group IX, the inhibitor and a method of using the inhibitor.

Group XIV, claim(s) 27, drawn to a method of using the NL-2 of group IX.

Group XV, claim(s) 2-5, drawn to the NL-3 of Figure 5.

Group XVI, claim(s) 6, 14 and 29, drawn to the DNA encoding the NL-3 of Group XV.

Group XVII, claim(s) 7, drawn to an antibody against the NL-3 of Group XV.

Group XVIII, claim(s) 8, drawn to a method of obtaining a substrate of the NL-3 of Group XV.

Group XIX, claim(s) 9-12, drawn to a method of obtaining an inhibitor of the NL-3 of Group XV, the inhibitor and a method of using the inhibitor.

Group XX, claim(s) 13, drawn to a method of using the NL-3 of Group XV.

The inventions listed as Groups I-XX do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

A technical feature linking the metallopeptidase of Group II, IX and XV is lacking because the proteins have different structure, substrate specificity and physical and chemical properties.

The technical feature linking I-VIII appears to be that they all relate to neprilysin-like metallopeptidase, the mouse NL-1 of Figure 3.

However, Valdenaire et al. (form PTO-1449) teach a method of obtaining neprilysin-like metallopeptidase (abstract and pages 212-213). Therefore, the technical feature linking the inventions of Groups I-VIII does not constitute a special technical feature as defined by PCT Rule 13.2, as it does not define a contribution over the prior art. Claim 1 is drawn to a method of obtaining a wide genus of neprilysin-like metalloproteases. Therefore, claim 1 is not necessarily a method of making the metalloprotease of Group II. Further, claim 6 is drawn to a DNA encoding the protein of claim 2. However, the DNA of claim 6 does not necessarily encode the variant metalloprotease of claim 2.

The products of Group II, III, IV and VI do not share a technical feature because a protein, DNA, antibody and inhibitor are different compounds, each with its own chemical structure and function, and they have different utilities. The antibody of Group IV and the proteins of Group II do not share a technical feature because the structure of an antibody of Group IV is not predictable from the structure of the protein of Group II and an antibody can cross-react with various proteins.

The technical feature linking I, VIII and IX-XIV appears to be that they all relate to neprilysin-like metallopeptidase, the NL-2 of Figure 4.

However, Valdenaire et al. (form PTO-1449) teach a method of obtaining neprilysin-like metallopeptidase (abstract and pages 212-213). Therefore, the technical feature linking the inventions of Groups I, VIII and IX-XIV does not constitute a special technical feature as defined by PCT Rule 13.2, as it does not define a contribution over

the prior art. Claim 1 is drawn to a method of obtaining a wide genus of neprilysin-like metalloproteases. Therefore, claim 1 is not necessarily a method of making the metalloprotease of Group X. Further, claim 20 is drawn to a DNA encoding the protein of claim 16. However, the DNA of claim 20 does not necessarily encode the variant metalloprotease of claim 16.

The products of Group X, XI, XII and XIII do not share a technical feature because a protein, DNA, antibody and inhibitor are different compounds, each with its own chemical structure and function, and they have different utilities. The antibody of Group XI and the proteins of Group X do not share a technical feature because the structure of an antibody of Group XI is not predictable from the structure of the protein of Group X and an antibody can cross-react with various proteins.

The technical feature linking I, VIII and XV-XX appears to be that they all relate to neprilysin-like metallopeptidase, the NL-3 of Figure 5.

However, Valdenaire et al. (form PTO-1449) teach a method of obtaining neprilysin-like metallopeptidase (abstract and pages 212-213) and the metallopeptidase of Valdenaire et al. is 100% identical to the NL-3 of Figure 5. Therefore, the technical feature linking the inventions of Groups I, VIII and IX-XIV does not constitute a special technical feature as defined by PCT Rule 13.2, as it does not define a contribution over the prior art.

The products of Group XV, XVI, XVII and XVIII do not share a technical feature because a protein, DNA, antibody and inhibitor are different compounds, each with its

own chemical structure and function, and they have different utilities. The antibody of Group XVII and the proteins of Group XV do not share a technical feature because the structure of an antibody of Group XVII is not predictable from the structure of the protein of Group XV and an antibody can cross-react with various proteins.

Therefore, the special technical feature of Group I is a method of obtaining a neprilysin-like metallopeptidase.

The special technical feature of Group II is the mouse NL-1 of Figure 3.

The special technical feature of Group III is the DNA encoding the mouse NL-1 of claim 2.

The special technical feature of Group IV is an antibody against the mouse NL-1 of group II.

The special technical feature of Group V is a method of obtaining a substrate of the mouse NL-1 of group II.

The special technical feature of Group VI is a method of obtaining an inhibitor of the mouse NL-1 of group II, the inhibitor and a method of using the inhibitor.

The special technical feature of Group VII is a method of using a metallopeptidase.

The special technical feature of Group VIII is a method of producing a soluble protein.

The special technical feature of Group IX is the NL-2 of Figure 4.

The special technical feature of Group X is the DNA encoding the NL-2 of claim 16.

The special technical feature of Group XI is an antibody against the NL-2 of group IX.

The special technical feature of Group XII is a method of obtaining a substrate of the NL-2 of group IX.

The special technical feature of Group XIII is a method of obtaining an inhibitor of the NL-2 of group IX, the inhibitor and a method of using the inhibitor.

The special technical feature of Group XIV is a method of using the NL-2 of group IX.

The special technical feature of Group XV is the NL-3 of Figure 5.

The special technical feature of Group XVI is the DNA encoding the NL-3 of Group XV.

The special technical feature of Group XVII is an antibody against the NL-3 of Group XV.

The special technical feature of Group XVIII is a method of obtaining a substrate of the NL-3 of Group XV.

The special technical feature of Group XIX is a method of obtaining an inhibitor of the NL-3 of Group XV, the inhibitor and a method of using the inhibitor.

The special technical feature of Group XX is a method of using the NL-3 of Group XV.

Under 37 CFR 1.475 (c), if an application contains claims to more or less than one of the combinations of categories of invention set forth in paragraph (b) of this section, unity of invention might not be present.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong Pak whose telephone number is 703-308-9363. The examiner can normally be reached on 6:30 A.M. to 5:00 P.M. Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapu Achutamurthy can be reached on 703-308-3804. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Yong D. Pak
Patent Examiner

June 5, 2003

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